



MALONONITRILE

UN 2647

Shipping Name: Malononitrile

Other Names: Cyanoacetonitrile
Dicyanomethane
Malonic acid dinitrile

Malonic dinitrile
Methylene cyanide



WARNING! • **POISON! BREATHING THE DUST OR THE FUMES FROM COMBUSTION OR DECOMPOSITION UPON HEATING CAN KILL YOU! CONVERTED TO CYANIDE IN THE BODY!**

- Firefighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel

Hazards:

- Combustion and decomposition products upon heating include toxic nitrogen oxides and cyanide
- May react with itself violently at elevated temperatures or upon contact with acids
- Container may explode when exposed to fire
- Irritating to skin, eyes, nose and lungs
- Vapors are heavier than air and will collect and stay in low areas

Awareness and Operational Level Training Response:

- Do not put yourself in danger by entering a contaminated area to rescue a victim
- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- For container exposed to fire evacuate the area in all directions because of the risk of explosion
- Evacuate or shelter in place the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

Description:

- White solid
- Sinks in water and is moderately soluble in water
- Flammable
- Vapors are heavier than air and will collect and stay in low areas
- Melts at 93° F

Operational Level Training Response:

RELEASE, NO FIRE:

- Cover material to protect from wind, rain or spray
- Prevent contaminated runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Ventilate confined area if it can be done without placing personnel at risk

FIRE:

- Material does not easily burn; fight surrounding fire with an agent appropriate for the burning material
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (unvented container distorts, bulges or shows any other signs of expanding), withdraw immediately to a secure location

First Aid:

- Do not put yourself in danger by entering a contaminated area to rescue a victim
- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
 - ♦ Inhalation - remove the victim to fresh air and give oxygen if available
 - ♦ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
 - ♦ Eye - rinse eyes with large volumes of water or saline for 15 minutes
 - ♦ Swallowed - do not make the victim vomit
- Seek medical attention
- Toxic effects may be delayed
- Note to physician: can cause cyanide toxicity; if symptoms indicate, the initial treatment includes the cyanide antidote kit

CAS: 109-77-3